==========

Sequence Listing could not be accepted due to errors.
See attached Validation Report.
If you need help call the Patent Electronic Business Center at (866) 217-9197 (toll free).
Reviewer: Anne Corrigan
Timestamp: [year=2008; month=7; day=16; hr=16; min=4; sec=15; ms=408;]

==========

****

Reviewer Comments:
<210> 11
<211> 26
<212> PRT
<213> Beta vulgaris

<400> 11

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His Asp Gln His Arg Asp Met Arg Leu Asp Ile Asp Asn Met Ser Tyr Glu
1               5                   10                  15

Glu Leu Leu Ala Leu Glu Glu Arg Ile Gly
            20                  25
```

The amino acid numbers "20" and "25" are misaligned, above. The "20" should be under the second "Leu" and the "25" should be under "Arg." Also, although the above <211> response is "26," 27 amino acids are shown.

****

Validated By CRFValidator v 1.0.3

Application No: 10552686 Version No: 2.0

Input Set:

Output Set:

Started: 2008-06-13 14:01:54.273
Finished: 2008-06-13 14:01:54.826
Elapsed: 0 hr(s) 0 min(s) 0 sec(s) 553 ms
Total Warnings: 0
Total Errors: 5
No. of SeqIDs Defined: 11
Actual SeqID Count: 11

Error code	Error Description
E 323	Invalid/missing amino acid numbering SEQID (11)at Protein (20)
E 323	Invalid/missing amino acid numbering SEQID (11) POS (21)
E 323	Invalid/missing amino acid numbering SEQID (11)at Protein (25)
E 323	Invalid/missing amino acid numbering SEQID (11) POS (26)
E 331	Count of Protein differs from the <211> tag Input: 26

SEQUENCE LISTING

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<120> Stress Tolerance

<130> 4982-12

<140> 10552686
<141> 2005-11-21

<150> PCT/EP04/50513
<151> 2004-04-13

<150> EP 03076064.9
<151> 2003-04-11

<160> 11

<170> PatentIn version 3.2

<210> 1
<211> 1344
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<213> Beta vulgaris

<220>
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<223> n is a, c, g, or t

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acgatcgtag agtctctgtt tttcactgta taaatctatt caaacaattt tctctctcct 180
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caactacgaa ttcatgatca gatcataatg cttgattctg caaaagcaac gacagagaca 540
gttgctgcat tgagatctgg tgctagtgct atgaaggcta tgcagaaagc aacaaacatt 600
gatgatgtgg acaagacaat ggatgagatc aatgagcaga ccgataactt gagacagata 660
caggaggcac tagctactcc tgttggtgca actgattttg atgaggatga attggaagct 720
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gcccctacgg caccaattca tgttccagaa ggcaagctgc cagcaaggcc aacaccccaa 840
aagaactctg aggaagatga actcgctgcg ttacaagcag aaatggcact ttgaaggctt 900
ttctttttc atgtttataa tcatgtccca aagaaatgga aacgggctgg aaaaaggaaa 960
aggcaaagga aaagaaaagg aaaagaaaaa gattgaaaat ctttattgat tgatggtggt 1020
atatttaagt attgagtgtt gatagcatct tgttgtcatg tactatatgc ctatatggag 1080
tacctgttat taattggtaa tgttaatgca aatattgtct ataccattga tgaacaaaga 1140
tgggggctgt aaactcttgg ttgtttttc gtttttcaat tttttgtttt cgtttttatt 1200
tttcagtcac ctactggttc tagtgactgg tgacaattgc tgtacagaga ttttgttgca 1260
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<210> 2
<211> 224
<212> PRT
<213> Beta vulgaris

<400> 2
Met Ser Ala Asn Met Phe Ser Arg Leu Phe Gly Ala Lys Ser Arg Asp
1 5 10 15

Ala Ala Thr Thr Glu Thr Thr Leu Ser Thr Leu Glu Lys Leu Asn Glu
20 25 30

Thr Leu Glu Met Leu Glu Lys Lys Glu Gln Leu Leu Met Lys Lys Ala
35 40 45

Thr Ala Glu Val Glu Lys Ala Lys Glu Phe Thr Arg Ala Lys Asn Lys
50 55 60

Arg Ala Ala Ile Gln Cys Leu Lys Arg Lys Arg Leu Tyr Glu Gln Gln
65 70 75 80

Val Glu Gln Val Gly Asn Phe Gln Leu Arg Ile His Asp Gln Ile Ile
85 90 95

Met Leu Asp Ser Ala Lys Ala Thr Thr Glu Thr Val Ala Ala Leu Arg
100 105 110

Ser Gly Ala Ser Ala Met Lys Ala Met Gln Lys Ala Thr Asn Ile Asp
115 120 125

Asp Val Asp Lys Thr Met Asp Glu Ile Asn Glu Gln Thr Asp Asn Leu
130 135 140

Arg Gln Ile Gln Glu Ala Leu Ala Thr Pro Val Gly Ala Thr Asp Phe
145 150 155 160

Asp Glu Asp Glu Leu Glu Ala Glu Leu Glu Glu Leu Glu Gly Ala Glu
165 170 175

Leu Glu Glu Gln Leu Leu Gln Pro Phe Thr Thr Ala Pro Thr Ala Pro
180 185 190

Ile His Val Pro Glu Gly Lys Leu Pro Ala Arg Pro Thr Pro Gln Lys
195 200 205

Asn Ser Glu Glu Asp Glu Leu Ala Ala Leu Gln Ala Glu Met Ala Leu
210 215 220

<210> 3
<211> 1341
<212> DNA
<213> Beta vulgaris

<220>
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<223> n is a, c, g, or t

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aaaatttttc ttccaaaatt catttccact attttcagat atttcatcac taaaatctcc 180
tcgagttaac ctaatcactc cattcttatt tcctctcgga aaaaaaccta atcaatcaac 240
tttacgcggt ttcattctcc gatctttttc gtttcctcgt aatttttag cgatcaccca 300
ttttcgttaa atatgtttac aagggttttc ggtaaaccta aggaaggaac aacgagtgct 360
gttgcaacgt tagacaaatt gagtgagaca ctcgaaatgt tggaaaaaaa agaacaggtg 420
cttttgaaga aggctggtgc tgaggttgaa aaggccaagg agttcactag agcaaagaac 480
aaacgtgctg ctataacttg tctgaagagg aagaggctat acgaacaaca aatagagcag 540
cttggaaaca tgcagttgcg aattcatgat cagatgatac tgcttgaagg ggcaaaggca 600
acaacagaga ctgtcgatgc attgaggtct ggtgcctcgg ctatgaaggc catgcaaaag 660
gcaacaaaca tcgataatgt ggataaaact atggacgaga tcaatgagca gacagagaac 720
ttaaaacaaa tacaggaagc tctctctgct ccaatcggtg cagcagctga cttttgatga 780
ggatgacctg aaagcagagc ttgaagagct agaaggtgct gaattgaaga agcaacttat 840
cagcccagct actactgctc ctgctgcacc agtgcatgct cctgctggaa aacaacctga 900
cgcccctgca cctcgggaag aatactgctt gaanaggatg agctcgccgc gttgcaagca 960
gagatggccc ctgtaaaaag tttttctgga ctggaataca ggagttggtc ttacatcaaa 1020
gtagctgtat aataagctaa ttattattgc tttgggtacc acctttacag gcacgtatta 1080
cccaatcacg gatatttggt aataaaatgt gctgtgtagg ttgcgtgatg ttgttgatta 1140
ggccgtagtt ctccttgtgc caggtcttga ttgcacctta ttctcgatgt aaatttcaga 1200
ttctcttata gacattgtaa tttgtgacaa aatatcgatc atttggtacg agttaaccct 1260
tcacatatgt aaaagaaata aaatacaatt cttgtatgac tttattttaa ccaaaaaaaa 1320
aaaaaaaaaa aactcgaggg g 1341

<210> 4
<211> 154
<212> PRT

<213> Beta vulgaris

<400> 4
Met Phe Thr Arg Val Phe Gly Lys Pro Lys Glu Gly Thr Thr Ser Ala
1 5 10 15

Val Ala Thr Leu Asp Lys Leu Ser Glu Thr Leu Glu Met Leu Glu Lys
20 25 30

Lys Glu Gln Val Leu Leu Lys Lys Ala Gly Ala Glu Val Glu Lys Ala
35 40 45

Lys Glu Phe Thr Arg Ala Lys Asn Lys Arg Ala Ala Ile Thr Cys Leu
50 55 60

Lys Arg Lys Arg Leu Tyr Glu Gln Gln Ile Glu Gln Leu Gly Asn Met
65 70 75 80

Gln Leu Arg Ile His Asp Gln Met Ile Leu Leu Glu Gly Ala Lys Ala
85 90 95

Thr Thr Glu Thr Val Asp Ala Leu Arg Ser Gly Ala Ser Ala Met Lys
100 105 110

Ala Met Gln Lys Ala Thr Asn Ile Asp Asn Val Asp Lys Thr Met Asp
115 120 125

```
Glu Ile Asn Glu Gln Thr Glu Asn Leu Lys Gln Ile Gln Glu Ala Leu
    130                 135                 140

Ser Ala Pro Ile Gly Ala Ala Ala Asp Phe
145                 150
```

<210> 5
<211> 1019
<212> DNA
<213> Beta vulgaris

<220>
<221> misc_feature
<222> (5)..(5)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (1001)..(1001)
<223> n is a, c, g, or t

<400> 5

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aacaccgaga aactaatgaa ccagatcatg gagctcaaat tcacctctaa atcacttcaa    120
cgtcaatctc gtaagtgcga gaaagaagaa aaagctgaga aactcaaagt caagaaagca    180
atcgagaaag gaaacatgga tggagctcga atttacgccg aaaacgcaat tcgtaagcgt    240
actgaacaga tgaactactt gcgcctcgct tctcgcctcg acgccgtcgt ttcgcgcctc    300
gatactcaag ctaagatgca aaccatcgga aaatcgatgg gatcaattgt taaatcgctt    360
gagtcgtctt tgaataccgg taatttgcag aagatgtcgg agacaatgga caattttgag    420
aagcaatttg ttaatatgga agttcaggct gagtttatgg agagttctat ggctgggagt    480
acttcgcttt cgactcccga aaccgaggtt aatagtttga tgcagcaggt ggcggatgat    540
tatggccttg aggtttctgt gggtttgcct caggctgctg gacatgctat tcctgttccg    600
aaggcggcgg agaaggttga tgaggatgat cttaccagga ggctcgccga gctcaaggct    660
cgaggttgaa gtcaaaggta aaaaggttaa ggttttattg ataatgttgt atagattatg    720
agctttactg atgatcaacc cttcgtgata tgggggtttg atgataattt gctctatatt    780
atggagattt ggagcttttg gaaccgataa ctgtggatgg tttaattatg tattatattg    840
tatttgtcta ttggaaaaaa aaaaaaaaaa aaaactcgag ggggggcccg gtaccaagat    900
ggcctttggt gggttgaaga aggaaaaaga cagaaacgac ttaattacct acttgaaaaa    960
agcctgtgag taaacaggcc ccttttcctt tgtcgatatc ntgtaattag ttagggggt    1019
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<210> 6
<211> 204
<212> PRT
<213> Beta vulgaris

<400> 6

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1               5                   10                  15

Thr Ser Lys Ser Leu Gln Arg Gln Ser Arg Lys Cys Glu Lys Glu Glu
            20                  25                  30

Lys Ala Glu Lys Leu Lys Val Lys Lys Ala Ile Glu Lys Gly Asn Met
        35                  40                  45

Asp Gly Ala Arg Ile Tyr Ala Glu Asn Ala Ile Arg Lys Arg Thr Glu
```

```
    50                  55                  60

Gln Met Asn Tyr Leu Arg Leu Ala Ser Arg Leu Asp Ala Val Val Ser
65                  70                  75                  80

Arg Leu Asp Thr Gln Ala Lys Met Gln Thr Ile Gly Lys Ser Met Gly
                85                  90                  95

Ser Ile Val Lys Ser Leu Glu Ser Ser Leu Asn Thr Gly Asn Leu Gln
            100                 105                 110

Lys Met Ser Glu Thr Met Asp Asn Phe Glu Lys Gln Phe Val Asn Met
        115                 120                 125

Glu Val Gln Ala Glu Phe Met Glu Ser Ser Met Ala Gly Ser Thr Ser
    130                 135                 140

Leu Ser Thr Pro Glu Thr Glu Val Asn Ser Leu Met Gln Gln Val Ala
145                 150                 155                 160

Asp Asp Tyr Gly Leu Glu Val Ser Val Gly Leu Pro Gln Ala Ala Gly
                165                 170                 175

His Ala Ile Pro Val Pro Lys Ala Ala Glu Lys Val Asp Glu Asp Asp
            180                 185                 190

Leu Thr Arg Arg Leu Ala Glu Leu Lys Ala Arg Gly
        195                 200
```

<210> 7
<211> 1510
<212> DNA
<213> Beta vulgaris

<220>
<221> misc_feature
<222> (2)..(3)
<223> n is a, c, g, or t

<400> 7

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ccagtagccg agaaaccagc tgagaagcca gctgagaagg cagttctacc acctgaagct    180
gagaaactag ctgcagctga atcagctgaa gccgagaagc cagctgattc agccgaggct    240
aagatagctc aacaagtctc attcaaagag gagactaatg ttgcaagtga gctacctgag    300
ctacatagaa aggctctcga ggacttgaag aaacttattc aagaagccct cgagaagcac    360
gagttctctt ctcctcctcc tccgcctccg cctgctccag ctaaagttga ggagaaggcg    420
gaagagaaga aagaggaaca acctccatcc accacctcca ccaccaccac caccaccacc    480
gcggtttcag atgaggttgc tgttgctcct ccatccgaag aggccccgaa aactgacgag    540
gcctctccga aagtggagga ggagcctgca aaaatagttg agcaaccacc tacaacaccg    600
gcagaagaac ctgaaccagc aaaaacacct gaggttgttg ttgctgaaga ggagaaaact    660
ggtgaggata ttaaagaaac tatagtagtc gaggttgcga caactacagc agcaccagta    720
ctaacagaac cagaatctgt tgaggagaca ccaaaagaag ctgaagttgt agtggaagaa    780
tcaccaaagg agccagaaga agtatcaata tggggaattc cacttcttgc tgatgaaaga    840
agtgatgtaa ttctattgaa attcttaaga gcaagagatt atagagtgaa agatgctttc    900
actatgatta gaaatactgc tcgttggaga aaagaatttg aggttgattc tttacttgat    960
gaagatcttg gaaatgatta tgagaaagtt gtttttacac atggagttga taaacaaggt   1020
```

```
cgtcctgttt gttataatgt gtttggagag tttcaaaata aggaacttta tcagaatact   1080
ttctctgatg cagaaaaaag gaaaaagttc ttgagatggt tgattcaatt ccttgaaaaa   1140
actattagaa ctcttgattt tagtcctgaa ggaattaatt cttttgttct tgttaatgat   1200
ttgaagaatt ctcctgggta tggtaagaga gatctttaca aagttattga caagtttctt   1260
gagattctcc aggataatta cccagaattt gctgctaaac agttgtgcat caatgtttca   1320
tggtggtctt ggcatacaac tggatctatt tgactgtatt tacaccaagg agcaagagca   1380
agtttgtgtt tgcaagccca tctaaaactg ctgagaccct tttcaagtac atagctcctg   1440
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ctgatactgt                                                          1510
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<210> 8
<211> 427
<212> PRT
<213> Beta vulgaris

<400> 8

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1               5                  10                  15

Val Pro Val Ala Glu Lys Pro Ala Glu Lys Pro Ala Glu Lys Ala Val
            20                  25                  30

Leu Pro Pro Glu Ala Glu Lys Leu Ala Ala Ala Glu Ser Ala Glu Ala
        35                  40                  45

Glu Lys Pro Ala Asp Ser Ala Glu Ala Lys Ile Ala Gln Gln Val Ser
    50                  55                  60

Phe Lys Glu Glu Thr Asn Val Ala Ser Glu Leu Pro Glu Leu His Arg
65                  70                  75                  80

Lys Ala Leu Glu Asp Leu Lys Lys Leu Ile Gln Glu Ala Leu Glu Lys
                85                  90                  95

His Glu Phe Ser Ser Pro Pro Pro Pro Pro Pro Pro Ala Pro Ala Lys
            100                 105                 110

Val Glu Glu Lys Ala Glu Glu Lys Lys Glu Glu Gln Pro Pro Ser Thr
        115                 120                 125

Thr Ser Thr Thr Thr Thr Thr Thr Thr Ala Val Ser Asp Glu Val Ala
    130                 135                 140

Val Ala Pro Pro Ser Glu Glu Ala Pro Lys Thr Asp Glu Ala Ser Pro
145                 150                 155                 160

Lys Val Glu Glu Glu Pro Ala Lys Ile Val Glu Gln Pro Pro Thr Thr
                165                 170                 175

Pro Ala Glu Glu Pro Glu Pro Ala Lys Thr Pro Glu Val Val Val Ala
            180                 185                 190

Glu Glu Glu Lys Thr Gly Glu Asp Ile Lys Glu Thr Ile Val Val Glu
        195                 200                 205

Val Ala Thr Thr Thr Ala Ala Pro Val Leu Thr Glu Pro Glu Ser Val
```

```
    210                 215                 220

Glu Glu Thr Pro Lys Glu Ala Glu Val Val Val Glu Glu Ser Pro Lys
225                 230                 235                 240

Glu Pro Glu Glu Val Ser Ile Trp Gly Ile Pro Leu Leu Ala Asp Glu
                245                 250                 255

Arg Ser Asp Val Ile Leu Leu Lys Phe Leu Arg Ala Arg Asp Tyr Arg
            260                 265                 270

Val Lys Asp Ala Phe Thr Met Ile Arg Asn Thr Ala Arg Trp Arg Lys
        275                 280                 285

Glu Phe Glu Val Asp Ser Leu Leu Asp Glu Asp Leu Gly Asn Asp Tyr
    290                 295                 300

Glu Lys Val Val Phe Thr His Gly Val Asp Lys Gln Gly Arg Pro Val
305                 310                 315                 320

Cys Tyr Asn Val Phe Gly Glu Phe Gln Asn Lys Glu Leu Tyr Gln Asn
                325                 330                 335

Thr Phe Ser Asp Ala Glu Lys Arg Lys Lys Phe Leu Arg Trp Leu Ile
            340                 345                 350

Gln Phe Leu Glu Lys Thr Ile Arg Thr Leu Asp Phe Ser Pro Glu Gly
        355                 360                 365

Ile Asn Ser Phe Val Leu Val Asn Asp Leu Lys Asn Ser Pro Gly Tyr
    370                 375                 380

Gly Lys Arg Asp Leu Tyr Lys Val Ile Asp Lys Phe Leu Glu Ile Leu
385                 390                 395                 400

Gln Asp Asn Tyr Pro Glu Phe Ala Ala Lys Gln Leu Cys Ile Asn Val
                405                 410                 415

Ser Trp Trp Ser Trp His Thr Thr Gly Ser Ile
            420                 425
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<210> 9
<211> 2052
<212> DNA
<213> Beta vulgaris

<220>
<221> misc_feature
<222> (2049)..(2049)
<223> n is a, c, g, or t

<400> 9

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ggaaggccgc ctctttttttg ggtcgctgac tattaactga aactttgtaa atctactcat    120
ggatgaatat tccaatagaa aatcttctgg tcttgctatc tccaggagag ggcctagcct    180
tgttttaagg gactcagcgg agaacaacaa agatcggaat gttcaggttt gcagccgagt    240
tggatgtggc agcaagttga attcagtgaa ggatgctaaa gttagctctc cgagtaaagt    300
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caaatctcca aaaactcctt tccgttcatc tgctcaagga aaagaaacca ttggaagttc 360
atccagaact ctggcttctc ctagtccttt taaaaaatct ctttcagacc ggaagaaaaa 420
actgccttct aatcttgaca ctgattcaga aatgtgcagt cttcaagatg aatccgagga 480
agtctctgga aagacccgga taagggttca gcccgagcca gaagatcatg attccattga 540
agcttcatca tctgaagctg ggagttccag ttcgggaccc tctaacagat tggcaaacag 600
aaatactcag aggtttgggt tggggcgcca agattctgct gcaagttctg cttcattttc 660
tttaaataaa accaaccaag ggcaaagaaa tggtggtggt ggtggtgcta gtgctaacag 720
gtataatctg cgacaattaa aatgtaactc aatctctgac gttgttccat caggttctcc 780
gcagtctgct gaatcaagtc tcagtaagaa gagggacaca ggttgtagga agagaaatgg 840
tgaagctgag agtagtttac ctgtgagagg taagaaaatt aatggggcaa cccaagatga 900
taggaggaat gactatccaa atcgtggaat atcaatatct gatacaaggc gtaccagaag 960
ctcgagtcct gggaataacg atgtcacgtc tgttaggagt cggagatctg ttgctagaac 1020
aaggctttca aatcag